

### **What is Claimed is:**

1. An optical scanner, comprising:
  - a glass window, for holding an object to be scanned;
  - an optical module, which is movable relative to the glass window and includes an
  - 5 image sensor for transforming an image of the object to electric signal for outputting,
  - and generating a digital image data;
  - a first reference white board, located on one side of the glass window; and
  - a second reference white board, corresponding the first reference white board;
  - wherein the image sensor measures the first reference white board and the second
  - 10 reference white board to obtain an AFE (analog front end) data and couple with
  - brightness variations in Y direction to compensate the digital image data when the
  - optical scanner is powered on thereby to perform instant scanning or preview.
2. The optical scanner of claim 1, wherein the first reference white board is perpendicular to the second reference white board.
- 15 3. The optical scanner of claim 1 further comprising a third reference white board perpendicular to the second reference white board and in parallel with the first reference white board.
4. The optical scanner of claim 1, the image sensor of the optical module is coupled with the second reference white board to measure the brightness variations in the Y
- 20 direction.
5. The optical scanner of claim 1 further comprising a photosensitive diode located on one side of the optical module to couple with the second reference white board to measure the brightness variations in the Y direction.